

DS sub C7 } 23. (AS NEW HEREIN) An optical sender according to claim 22, further comprising:
a circuit supplying a power to said light source; and
a power supervisory circuit monitoring on/off of supply of the power to said light source
and outputting said power alarm during a given time period from a time the supply of the power
to said light source becomes on or off.

24. (AS NEW HEREIN) An optical sender according to claim 23, wherein said power
supplying circuit comprises a constant current source.

Q1 con ix sub C7 } 25. (AS NEW HEREIN) An optical sender according to claim 22, further comprising:
a wavelength monitor detecting the wavelength of said light beam; and
a circuit outputting said wavelength alarm when the wavelength detected by said
wavelength monitor is deviated from a predetermined range.

26. (AS NEW HEREIN) An optical sender according to claim 25, further comprising
a first controlling device controlling said light source so that the wavelength detected by said
wavelength monitor is maintained constant.

27. (AS NEW HEREIN) An optical sender according to claim 26, wherein:
said light source comprises a laser diode; and
said first controlling device comprising a temperature controller controlling the
temperature of said laser diode.

28. (AS NEW HEREIN) An optical sender according to claim 25, wherein said wavelength monitor is provided between said light source and said optical modulator.

29. (AS NEW HEREIN) An optical sender according, to claim 25, wherein said optical modulator is provided between said light source and said wavelength monitor.

Sub C8 } 30. (AS NEW HEREIN) An optical sender according to claim 25, wherein:
said light source comprises a laser diode outputting a forward beam and a backward beam;
said forward beam being supplied to said optical modulator, said backward beam being supplied to said wavelength monitor.

31. (AS NEW HEREIN) An optical sender according to claim 22, wherein said shutting down device comprises:
an optical element receiving said optical signal output from said optical modulator; and
a second controlling device controlling said optical element so that the transmittance of said optical element is reduced when receiving at least one of said power alarm and said wavelength alarm.

32. (AS NEW HEREIN) An optical sender according to claim 31, wherein said optical element is a Mach-Zehnder type lithium niobate modulator.

33. (AS NEW HEREIN) An optical sender according to claim 31, wherein said

optical element is a Mach-Zehnder type semiconductor modulator.

34. (AS NEW HEREIN) An optical sender according to claim 31, wherein said optical element is an electroabsorption type modulator.

35. (AS NEW HEREIN) An optical sender according to claim 31, wherein said optical element is a semiconductor optical amplifier.

alix
sub
10 } 36. (AS NEW HEREIN) An optical sender according to claim 22, wherein said shutting down device comprises a switching device switching the operating point of said optical modulator and shutting down input of said main signal into said optical modulator when receiving at least one of said power alarm and said wavelength alarm.

37. (AS NEW HEREIN) An optical sender according to claim 36, wherein said optical modulator is a Mach-Zehnder type lithium niobate modulator.

38. (AS NEW HEREIN) An optical sender according to claim 36, wherein said optical modulator is a Mach-Zehnder type semiconductor modulator.

39. (AS NEW HEREIN) An optical sender according to claim 36, wherein said optical modulator is an electroabsorption type modulator.

sub
c10 } 40. (AS NEW HEREIN) A terminal device for wavelength division multiplexing,

comprising:

a plurality of optical senders outputting optical signals having different wavelengths; and

an optical multiplexer receiving said optical signals to output wavelength division

multiplexed signal light:

wherein each of said optical senders comprises:

a light source outputting a light beam;

an optical modulator modulating said light beam in accordance with a main signal to

output an optical signal; and

a shutting down device shutting down said optical signal when receiving at least one of a power alarm relating to on/off of power supply and a wavelength alarm relating to the wavelength of said light beam.

41. (AS NEW HEREIN) An optical communication system for wavelength division

multiplexing, comprising:

first and second terminal devices; and

an optical fiber transmission line connecting said first and second terminal devices;

wherein at least one of said first and second terminal devices comprises:

a plurality of optical senders outputting optical signals having different wavelengths; and

an optical multiplexer receiving said optical signals to output wavelength division

multiplexed signal light;

wherein each of said optical senders comprises:

a light source outputting a light beam;

an optical modulator modulating said light beam in accordance with a main signal to